Conclusions: From analysis of data over 4 years, it was noted a multi-modal framework of interventions can ensure sustained compliance to hand hygiene among staff in this hospital which was consistent with findings in other studies elsewhere.

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EXPLORE THE EFFECTIVENESS OF HAND HYGIENE STRATEGIES IN TAIWAN MEDICAL INSTITUTION

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Purpose: The Centers for Disease Control (CDC) recommends hand hygiene as the simplest, most effective method to prevent health care-associated infections. The purpose of this study was to review of literature on effectiveness with hand hygiene strategies in Taiwan medical institution.
Methods: A review for relevant published literature in 2004-2014 was undertaken using electronic databases. Databases searched included: Medline, CINAHL, EMBASE, Chinese electronic periodical Service (CEPS), National Digital Library of Theses and Dissertations in Taiwan. Eight studies met the inclusion criteria.
Results: Results showed that 8 hand hygiene programs were effective. Hand hygiene strategies such as : Use of alcohol-based hand rubs at the points of patient care. Education program, posters, slogans, revised hand hygiene standard, online self-learning materials, established a monitoring mechanism and enforcement of reward-punishment regulations. To improvement of hand hygiene compliance can effectively transform to the healthcare quality and patient safety in medical centers.
Conclusions: These review shows that hand hygiene strategies can increase the medical staff hand hygiene compliance rate and the correction rate of hand hygiene.
Keywords: Hand Hygiene, Compliance, Stratgies.

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USING FEEDBACK WITH ADENOSINE TRIPHOSPHATE (ATP) BIOLUMINESCENCE ASSAY IMPROVED THE CLEANLINESS OF COMPUTERIZED NURSING CART

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Purpose: Environment cleanliness is important to prevent microbial colonization and healthcare-associated infections at hospitals. This study is using adenosine triphosphate (ATP) bioluminescence assay and feedback to nursing staff to improve the cleanliness of computerized nursing cart.
Methods: We prospective use ATP bioluminescence assay and microbiological method(aerobic colony count, [ACC]) for the cleanliness quality of computerized nursing cart during June 2014 to October 2014. Environmental samples were obtained at 11 AM from computerized nursing cart, including 5 high-touch surfaces (keyboard, mouse, drawer handles, desktop, and tape dispenser). Interventions were developing cleaning procedures under the charge of nurses and housekeepers. We also educate hand hygiene and cleaning policy by seminars and poster announcement.
Results: The mean ATP value from 100 swabs decreased from 1332 relative light units (RLU, range:84-22359) before interventions to 740 RLU (range:23-8165) after interventions ($P=0.04$). The failure rates was 53% before and 36% after interventions($P=0.02$) under benchmark of 500 RLU. ACC had marginal ability to differentiate the quality of environment cleanliness of our study (5% failure rate before and 1% after, $P=0.09$).
Conclusions: Using ATP bioluminescence assay and feedback to nursing staff can improve the cleanliness of computerized nursing cart. Although a validated cutoff value of RLU that can be correlated with increased infection had not yet been suggested, it was a simple and fast method to feedback environment cleanliness.

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MONITORING BY VISUAL IDENTIFICATION TO ENHANCE THE CORRECTNESS OF DISINFECTION IMPLEMENTATION IN THE HOSPITAL ENVIRONMENT

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Purpose: The occurrence of multidrug-resistant organisms (MDRO) is an increasingly common problem. The contamination of hospital environment and facilities is likely a source of MDRO, which is necessary to eliminate for infection control.
In Mar. 2014, the correctness rate of environmental disinfection in this medical center was only 27.7%. The low achievement items included the proper use of wipes (0%), correct tool allocation (20%), the concentration of bleach (10%), the order of contaminated region cleaning (20%), personnel protection (10%), and to avoid using brooms contaminated areas (0%).
Methods: We established a cross-unit team and enforced multiple measures to improve environmental disinfection, including (A) an inspection checklist for environmental cleaning and disinfection processes, (B) management by a model of visual recognition employing tools of different colors, specifying "areas" of contamination, marking lines clearly, small reminder cards, (C) picture-oriented education and training program, and (D) auditing and feedback mechanisms. Data were thereafter analyzed monthly.
Results: From Mar. to Aug. 2014, the correctness rate of cleaning and disinfection increased from 27.7% to 91.5%: the proper use of wipes (100%), correct tool allocation (90%), the concentration of bleach (90%), the order of contaminated region cleaning (90%), personnel protection (91.7%), and to avoid using brooms contaminated areas (60%). Significant improvements were observed via the audit.
Conclusions: Proper disinfection of the hospital environment has been a difficult issue because lacks of standard for management processes, education and training systems. The visual-assisted implementation in our study marked improved the correctness of disinfection processes. Continue improvement is required to maintain the quality of cleaning the hospital environment.

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USING FAILURE MODE AND EFFECTS ANALYSIS IMPROVE SUPPLY EFFICIENCY CENTRAL VACUUM AUTOCLAVE INDEED CORRECT RATE

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Purpose: Sterilization is an important indicator of quality infection control and patient safety it. Supply Center main business is to provide repetitive use of equipment and medical supplies sterilization services, equipment and medical supplies to be totally sterilized before reduce the chances of infection in patients; therefore repetitive use of the equipment, ensure the quality of its sterilization for patient safety and efficiency avoid cross-infection is very important.
This case occurred in the execution unit Autoclave job is due to the human factor is not really start vacuum autoclaves, not placed in a pressure cooker and biological indicator biological indicator Failing culture results, based on the implementation of the instrument of issuance; a series of omissions sterilization is not really caused by the effect of the unusual event. Failure Modes and Effects Analysis by the way in the implementation process to explore the hidden vacuum autoclave sterilization potential risk of failure to ensure that the human operator Vacuum Autoclave process correctly.
In order to avoid similar incidents from happening again, so the idea of using healthcare Failure Mode and Effects Analysis (HFMEA) of practices, excavations blind spots, improve work habits and processes, reduce the risk of sterilization failure, in order to enhance the supply of central vacuum sterilized in an autoclave quality indeed effect correct rate of 100%.